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**Cheng et al.**

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(54) **BICYCLE PEDAL STRUCTURE CAPABLE OF TRIGGERING AUXILIARY POWER**

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(57) **ABSTRACT**

A bicycle pedal structure capable of triggering auxiliary power includes a base, sleeve unit, crank shaft, pedal cranks and treading force sensing unit. The sleeve unit has first and second sleeves disposed in two openings of the base. The crank shaft is fitted in the first and second sleeves and thus rotatably disposed in the base. The pedal cranks are coupled to two ends of the crank shaft, extend in opposite directions, are substantially perpendicular to the crank shaft, and each have a pedal for rotating the crank shaft under a treading force. The treading force sensing unit has piezoelectric plates disposed on at least the first and second sleeves and above the crank shaft. The bicycle pedal structure is mounted on a bicycle chassis and connected to a driving-controlling system to trigger the driving-controlling system to generate and supply digit modularized auxiliary power to the bicycle pedal structure.

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B62M 1/36; B62D 6/10; G01L 3/108; Y10T  
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See application file for complete search history.

**6 Claims, 5 Drawing Sheets**

